

Disclaimer/Publisher's Note: The statements, opinions, and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions, or products referred to in the content.

Review

The effects of Emotional intelligence on teachers' job satisfaction: A scoping review

Grace Hulda * and Xudong Zhu

Center for Teacher Education Research, Beijing Normal University, Beijing 100875, China

* Correspondence: Siyingleiyla@qq.com.

Abstract: Recent trends in assessing teachers' psychological aspects have led to considering emotional intelligence (EI) as one of the main factors determining teachers' job satisfaction. The present study aims to explore the different effects of emotional intelligence on teachers' job satisfaction. This study used the Scoping review method and focused specifically on studies conducted from January 2014 to February 2023, and 21 studies met the inclusion criteria. Overall, the results indicated that emotional intelligence has both direct and indirect positive effects on teachers' job satisfaction. However, the results on the effects of various EI models on teachers' job satisfaction were inconsistent. The findings suggest that more research is needed to investigate the impact of the ability model of EI on teachers' job satisfaction, as well as longitudinal studies to understand the long-term effects of this relationship. Finally, studies are also needed to determine whether demographic factors influence the effects of EI on teachers' job satisfaction in different countries and contexts.

Keywords: Emotional intelligence; job satisfaction; teacher; Scoping review

1. Introduction

Emotional intelligence (EI) is an important factor that affects teachers' professional development and teaching quality. It has its roots in "social intelligence", which is "the ability to understand and manage men and women, boys and girls - to act wisely in human relations" and was first proposed by Thorndike in 1920[1]. In 1990, Salovey and Mayer were interested in the concept of social intelligence and from this notion, they proposed the concept of "emotional intelligence," which they defined as the ability of people to manage their emotions as well as a "subset of social intelligence that involves the ability to monitor one's own and other's feelings and emotions, to discriminate among them, and this information to guide one's thinking and action[2]." According to Salovey and Mayer (1990), people with a high level of EI also have a high level of emotional competence, which is characterized by their ability to regulate and appraise their own emotions and the emotions of others (e.g., anger, sadness) to achieve a variety of adaptive outcomes or emotional states (e.g., motivation, creative thinking)[2]. For example, some people can recognize other people's emotions more accurately and develop more effective strategies to regulate their own emotions than others[3]. On the other hand, Coleman (1995), guided by this definition of Salovey and Mayer, popularized the concept of (EI) in his book "Emotional Intelligence: Why It Can Matter More Than IQ" and suggested that emotional intelligence is "the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and our relationships." In the field of education and teaching, the importance of teachers' emotional intelligence has been widely acknowledged[4–7]. It can be defined as the teacher's capacity to manage his or her own emotions and those of others.

Prior research has underlined the effects of EI on job-related outcomes, including job satisfaction[8], [9]. Job satisfaction (JS) is a concept that originates from organizational psychology. Teacher job satisfaction is teachers' overall attitudes and views about their



working conditions and profession. It is essential to their effectiveness, schools, and student's academic and educational achievement [10]. It also refers to how much teachers enjoy the conditions in which they carry out their professional activities [11]. Therefore, understanding the effects of Emotional intelligence on teachers' job satisfaction is essential as it can provide information for effective school administration.

In this article, a scoping review of the effects of Emotional intelligence (EI) on teachers' job satisfaction is presented. Given that EI is still emerging and relatively new in the field of teacher education and that it plays a significant role in teachers' job satisfaction, the present study aims to provide an overview of relevant research and identify key trends and gaps existing in the literature. Considering the purpose of the review and the characteristics of different types of reviews [12], a scoping review methodology was applied because this strategy is designed to produce overviews of available research rather than to provide an answer to a narrow and concise research question within an already established research field[13]. The main contribution of this article is as follows: Firstly, this review provides an overview of the different effects of EI on teachers' job satisfaction; secondly, this study identifies and categorizes the effects of different EI models on teachers' job satisfaction and, finally, it presents research gaps in the existing literature. The present scoping review can therefore guide more systematic studies, and future attempts to develop, investigate and evaluate other aspects of the relationship between EI and teacher job satisfaction.

2. Emotional intelligence theoretical models

In terms of theoretical models, there are currently three main directions for research on emotional intelligence among teachers. The ability model of EI comes first, followed by the mixed model, and finally, the trait model. These three models are important because they influenced the construction of EI measuring instruments and the research on teachers' emotional intelligence.

2.1. The ability model of EI.

The ability model of EI was first developed by Mayer and Salovey (1990) and followed their first definition of EI, which is based on people's ability to control their own emotions and the emotions of others and is considered a set of skills. This model has the advantage of directly assessing an individual's level of task performance and is divided into four categories: perception of emotions, facilitation, understanding, and management of emotions, as shown in **Figure 1**[14]. According to Mayer and Salovey (1997), the first category, which is the perception of emotions, is the ability to accurately perceive emotions in one's own physical and psychological states, as well as in the face or voice of others[3]. The second category, Emotional facilitation, is the incorporation of emotions into the cognitive system in order to support and facilitate thinking. The third category, the Understanding of emotions, refers to the comprehension of various emotions' meanings and the ability to analyze them. Lastly, the management of emotions is the successful regulation of one's own and others' emotions. It is worth mentioning that the ability model of EI has been mainly assessed using the Multivariate Emotional Intelligence Scale (MEIS) and the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).

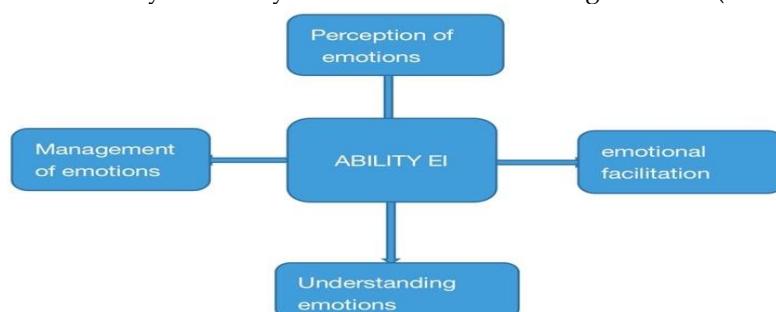


Figure 1. Mayer and Salovey's (1997) Model of Emotional Intelligence.

2.2. *The mixed model of EI*

The mixed model is the second of the three main models for conceptualizing EI. The mixed model includes two principal branches. The first branch, which was developed by Bar-On (1997), consists of five key components: 1) Intrapersonal skills, which are the ability to recognize and comprehend one's own emotions, feelings, and ideas; 2) Interpersonal skills, which are the ability to recognize and understand emotions, feelings, and ideas in others; 3) Adaptation Skills, which are the ability to change our feelings in response to circumstances; 4) Stress Management Skills, which are the ability to cope with stress and control emotions; and 5) General Mood Regulation which refers to the ability to experience and express positive emotions and optimism[15]. According to Bar-On (1997), EI is a set of non-cognitive skills and competencies that influence the ability to cope successfully with the demands and pressures of the environment. On the other hand, the second branch, developed by Goleman in 1998, conceptualizes EI similarly to the Bar-On model and consists of the following five components: self-awareness, self-regulation, self-motivation, empathy, and social skills[16]. Both mixed models of EI frequently incorporate concepts from personality as they focus on typical performance.

2.3. *The trait model of EI*

The last model is the trait model of EI developed by Petrides and Furnham in 2001, which combines self-reported behavioral tendencies and self-perceived skills (as opposed to ability EI, which concerns actual abilities and ought to be measured with maximum performance rather than self-report test) additionally, it is related to dispositional tendencies, personal characteristics, and self-efficacy beliefs[17]. It is categorized by fifteen personality dimensions: adaptability, assertiveness, emotion appraisal (self and others), emotion expression, emotion management (others), emotion regulation, impulsiveness (low), relationship skills, self-esteem, self-motivation, social competence, stress management, trait empathy, trait happiness, and trait optimism, which are grouped under four aspects: well-being, self-control, emotionality, and sociability[17].

In summary, although these three models have different characteristics, we can observe that they all share the idea of the original definition of EI, which is the ability to regulate our own and other people's emotions. However, the ability model assesses EI with objective instruments that require individuals to solve emotional problems, whereas the mixed and trait models evaluate EI with subjective instruments that require individuals to self-evaluate their level of EI. Understanding and synthesizing existing models can help this study identify the impacts of the various EI models on teachers 'job satisfaction.

3. Method

This study used a scoping review methodology to get an overview of the existing literature on the effects of EI on teachers' job satisfaction, following the framework of Arksey and O'Malley (2005)[13]. According to Grant and Booth (2009), a scoping review "provides a preliminary assessment of the potential size and scope of available research literature[18]. Its purpose is to define the nature and scope of research evidence, which typically includes ongoing research. [...] Policymakers can use scoping reviews to determine whether a full systematic review is necessary."

Following the framework of Arksey and O'Malley (2005), This study is divided into five components which are: 1) identifying the research question; 2) identifying relevant studies; 3) selecting studies; 4) charting the data; and 5) collecting, summarizing, and reporting the results. In the following sections, the review process is presented according to the five to the five stages mentioned above[13].

3.1. *Identification of the research question*

The identification of the research question was motivated by the desire to explore EI's effects on teachers' job satisfaction. Therefore, the initial research questions for this review were:

1. What does the literature say about the effects of EI on teachers' job satisfaction?
2. What effects do the different EI models have on teachers' job satisfaction?
3. Where are the research gaps in the existing literature?

3.2. Identifying relevant studies

The present study identified relevant studies through incremental searches in four electronic databases, namely: Web of Science (WOS), Science Direct, ERIC, and EBSCO. The keywords used for the search were emotional intelligence OR self-awareness OR self-motivation OR empathy OR Emotion regulation AND job satisfaction, AND teacher OR instructor OR educator. As shown in **Table 1**, the Boolean OR operator separated each search term, and the Boolean AND operator separated each dimension. The search was limited to English-language studies published from January 2014 to February 2023. Additional publications were identified by examining the reference lists of those studies selected for inclusion in this review (See **Table 1** for full details).

Table 1. Key search terms.

Search terms
Emotional intelligence OR self-awareness OR self-motivation OR empathy OR Emotion regulation
AND
Job satisfaction
Teacher OR instructor OR educator.

3.3. Study selection

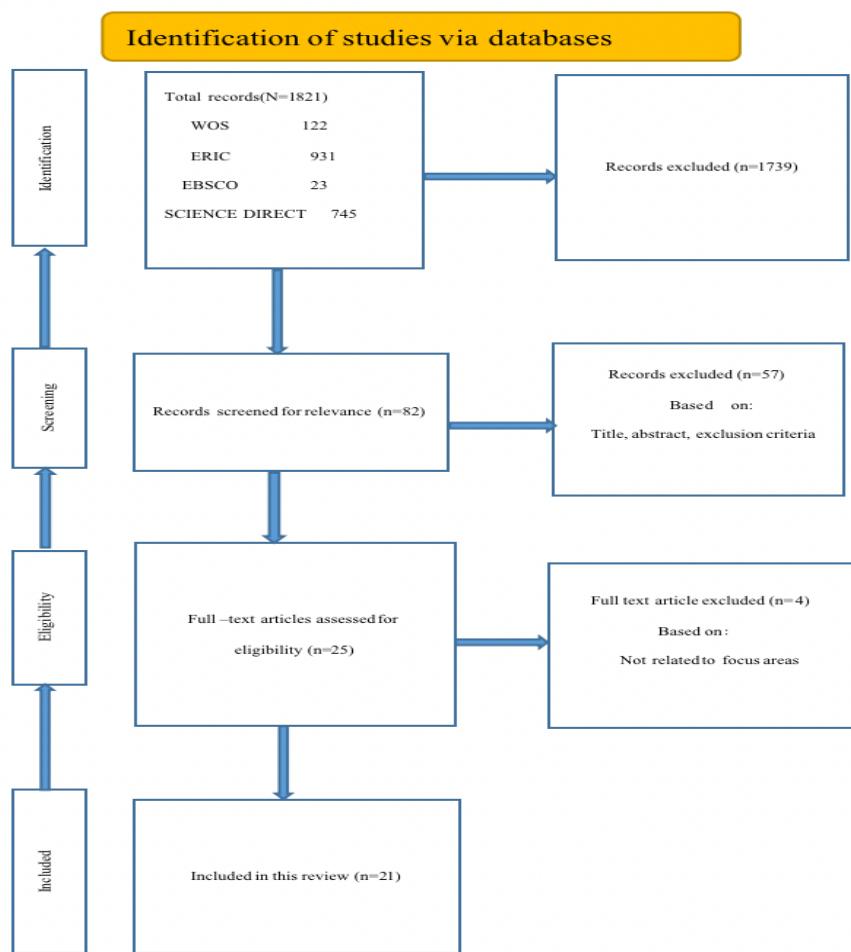
Once relevant articles were identified, titles and abstracts were evaluated for a full review. Articles were ultimately selected based on the first goal of this scoping review, that is, to identify the effects of Emotional intelligence on teachers' Job satisfaction. Finally, several inclusion/exclusion criteria were applied. First, the sample population had to include teaching professionals, which means these studies had to use teachers' samples in their research design; this includes primary school teachers, secondary and high school teachers, university teachers, etc. Hence, studies with other human service professionals, such as healthcare workers or social workers etc., were eliminated from this scoping review. Second, only those studies, including Emotional intelligence and teacher job satisfaction as related variables, were selected for a full review. Titles and abstracts were screened independently. Lastly, our third criterion was that emotional intelligence assessment tools were based on an EI framework. This criterion led us to include studies that evaluated at least one EI dimension. Therefore, we excluded articles that followed different theoretical approaches (e.g., emotional labor or coping strategies).

3.4 Charting the data.

First, a total of 1821 studies were identified, 512 duplicates and 1227 studies with unrelated titles were excluded, and 82 non-duplicate studies were retained as the initial literature to be screened.

Second, based on the title and abstract, we excluded 57 studies that did not meet the criteria, and of the remaining 25 studies, 4 full-text studies were not related to the focus area of this review. Finally, 21 studies were included in this review. Furthermore, the full 21 articles were reviewed independently by the authors, and the general information of the selected studies was summarized and charted, emphasizing the authors and year of publication, sample size, study population, measures and instruments used to collect data

and key findings. Following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) statement, **Figure 2** illustrates the study selection process, including procedures for searching databases, screening titles and abstracts, screening full texts, and selecting articles that are eligible for inclusion[19].



Flow diagram showing the studies included and excluded

Figure 2. PRISMA flowchart of the study selection process.

Table 2. Overview of the reviewed studies.

line	Authors(year)	Sample size	Population	Measures	Context	Key findings
1	Rogowska, A. M., & Meres, H. (2022)	N=322	primary, high, technical, secondary, school, -Trade school, teachers	-Multivariate Emotional Intelligence Scale (MEIS) -Minnesota Satisfaction Questionnaire (MSQ) -short form	Poland	Emotional intelligence is a significant positive predictor of job satisfaction.
2	Peláez-Fernández, M. A., et al (2021)	N= 685	-childhood - primary	-Wong and Law EI Scale	Spain	Emotional intelligence was positively related to happiness and job satisfaction

			-secondary school teachers	-Overall job satisfaction scale	
3	Latif, H., Majoka, M. I., & Khan, M. I. (2017)	N=210	Secondary school teachers	-Self-Report Emotional Intelligence Test (SREIT) -Job Satisfaction Scale	Pakistan EI had significant direct effect on job satisfaction
4	Mérida-López, S., & Extremera, N. (2020)	N=190	Secondary-school teachers	-Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT v.2.0) -Job satisfaction was measured with a 5-item scale Spanish version scale	Southern Spain -ERA did not show a significant main effect for predicting levels of teachers' job satisfaction -However, the interaction between work engagement and ERA significantly augmented the prediction of both job and life satisfaction.
5	Sökmen, Y., & Sarıkaya, İ. (2022).	N=252	primary school teachers	-Trait Emotional Intelligence Questionnaire-Short Form (TEQue-SF) -Minnesota Satisfaction Questionnaire MSQ Scale	Turkey Self-efficacy and emotional intelligence levels of primary school teachers predict their job satisfaction levels in a meaningful and positive way.
6	Toprak, M., & Savaş, A. C. (2020).	N=27 school Headmasters and 469 Teachers.	primary and secondary school	-Bar-on Emotional Quotient Inventory (EQ-i) -Short-Form Minnesota Satisfaction Questionnaire (MSQ)	Turkey -Headmasters' EI competencies and teachers' EL competencies significantly predict teachers' job satisfaction
7	Butakor, P. K., Guo, Q., & Adebanji, A. O. (2021)	N=197	Senior High School and basic schools	Wong and Law Emotional Intelligence Scale	Ghana EI positively affected teachers' job satisfaction

8	Sun, P., Chen, J. J., & Jiang, H. (2017).	N=398	Primary school teachers	-Wong Law Emotional Intelligence Scale -Overall Job Satisfaction Scale.	China	-Coping humor was a significant mediator between EI and job satisfaction -coping humor only mediated two sub-dimensions of EI (use of emotion and regulation of emotion) and job satisfaction.
9	D'Amico, A., Geraci, A., & Tarantino, C. (2020).	N=238	-infantry -primary -secondary school teachers	-Wong and Law Emotional Intelligence Scale (WLEIS) -Organizational Satisfaction Scale	Italy	There is a positive correlation between PEI (perceived EI) and job satisfaction
10	Mérida-López, S., Quintana-Orts, C., Hintsa, T., & Extremera, N. (2022)	N=1,079	-preschool, primary, and secondary schools	-The Spanish version of the Wong and Law EI Scale -Spanish version of the Job Satisfaction Scale	Spain	-EI was positively related to job satisfaction only via support from supervisors, which, in turn, was negatively related to intentions to quit.
11	Lee, Y. H., Kwon, H. H., & Richards, K. A. R. (2019).	N=271	High school physical educators	-Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT SCALE)	United States	The direct effect of EI on teacher job satisfaction was not significant, but there was a positive and significant indirect effect as mediated through unpleasant emotions and emotional exhaustion
12	Li, M., Pérez-Díaz, P. A., Mao, Y., & Petrides, K. V. (2018)	N=881 teachers and N=37 principals	Primary schools Teachers	Trait Emotional Intelligence Questionnaire-Short Form(TEIQue-SF) -Job satisfaction scale.	Mainland China (hubei province)	Teachers with higher trait EI perform better than those with lower trait EI, partially because they are more satisfied with their jobs, which, in turn, leads to better performance.
13	Waruwu, B. (2015).	N=170	Senior High School Teachers	Used Goleman mixed EI Model Scale	Indonesia.	There is a significant positive relationship between teachers' perceptions of the principal's emotional intelligence and job satisfaction of teachers.
14	Singh, B., & Kumar, A. (2016).	N=300	Primary school teachers	-Emotional Intelligence Scale (EIS) -Teachers' Job Satisfaction Scale (TJSS)	India	The five dimensions of EI predict teachers' job satisfaction.

15	Wijayati, D. T., Kautsar, A., & Karwanto, K. (2020).	N=200	Junior high schools teachers	-Goleman mixed EI model	Pakistan	Emotional Intelligence has a significant positive effect on Job Satisfaction
16	Kassim, S. I., Bambale, A. J., & Jakada, B. A. (2016).	N=98	University lecturers	-Wong and Law -Generic job satisfaction scale	Nigeria	There is positive relationship between regulation of emotion and job satisfaction.
17	Ahmed, H. (2015).	N=100	University Teachers	-EI questionnaire based on Goleman model was used for the measurement -Wysocky and Kromm's Job Description Index contains 41 questions measuring job satisfaction.	Pakistan	There is a significant positive correlation between Job satisfaction and emotional intelligence.
18	Colomeischi, A. A., & Colomeischi, T. (2014).	N=575	Urban and rural area teachers	-The Schutte et al. (1998) EI scale. -The Work Satisfaction Questionnaire	Romania	The more emotional intelligent they are the more satisfied with their teaching job they are and also, they have a more positive attitude towards work.
19	Luque-Reca, O., García-Martínez, I., Pulido-Martos, M., Burguera, J. L., & Augusto- Landa, J. M. (2022).	N=423	Primary school teachers	-Wong and Law Emotional Intelligence Scale (WLEIS; Spanish version)	southern Spain.	Trait ER was shown to be capable of indirectly influencing intrinsic job satisfaction through both PA and NA (negatively in this case)

20	Karim, J., Bibi, Z., Ur Rehman, S., & Khan, M. S. (2015).	N= 150	University teachers	-Wong and Law Emotional Intelligence Scale (WLEIS). -Job Satisfaction Survey.	Pakistan	Workplace incivility mediates the relationship between EI and work-related outcomes including job satisfaction.
21	Mustafa, M. Z., Buntat, Y., Razzaq, A. R. A., Daud, N., & Ahad, R. (2014)	N=138	Teachers from various vocational colleges	-Used Goleman mixed EI Model Scale	Malaysia southern zone	There was a positive relationship between emotional intelligence and job satisfaction

3.5. Summarizing, and reporting the results.

The following sections summarize and discuss the results from the 21 included studies following Arksey and O'Malley's (2005) framework for scoping reviews[13].

4. Results

4.1. Studies 'characteristics

4.1.1. Studies distribution by country

A total of 21 studies were included in our review, and the main findings, including EI and JS measurement tools are presented in **Table 2**. **Figure 3** shows that the studies were conducted in various countries, and the countries that have carried out the most research on this topic were Spain(n=4) and Pakistan(n=4), followed by Turkey(n=2), China (n=2) with the lowest production in Egypt, Poland, Ghana, Nigeria, United States, Malaysia, Romania, Italy, Indonesia, and India(n=1).

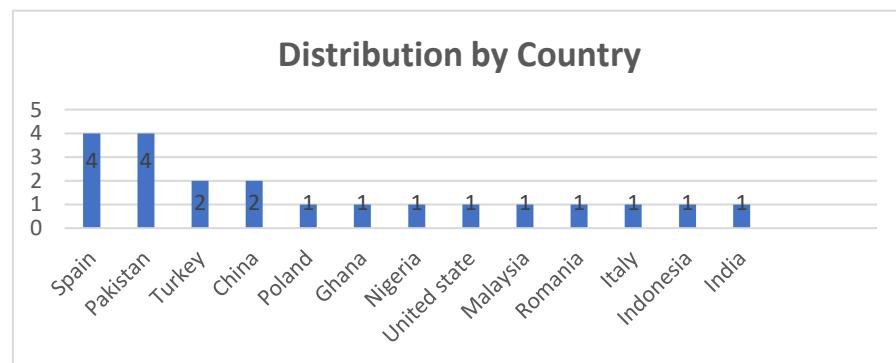


Figure 3. Studies distribution by country.

Of those 21 studies, only one study was identified using a large sample number (n=1,079) and was conducted in Spain.

4.1.2. Research Methods of Included Studies

Out of the 21 studies, none were conducted using qualitative or mixed methods. As a result, to examine the effects of EI on teacher job satisfaction, only a variety of quantitative research designs, including cross-sectional, correlational, descriptive, Survey, and exploratory research designs, were employed in these studies (see **Figure4**).

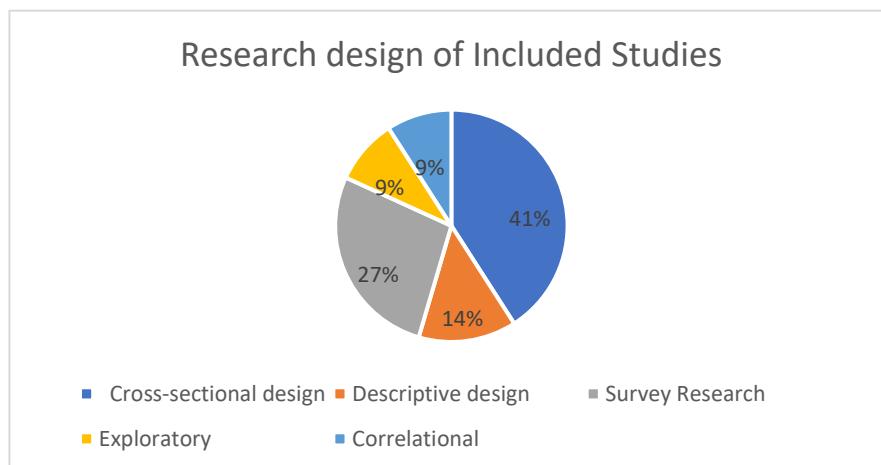


Figure 4. Research design of Included Studies.

4.1.3. Participants Involved in the Research

This study found that most of the participants in these studies were from primary (n=5) and secondary schools (n=5), 3 studies were conducted with university teachers, 3 studies with a mixed population of preschool, primary, and secondary school teachers, 1 study with a population of a variety of high and technical secondary and trade schools teachers, 1 study with both primary and secondary school teachers, 1 study with teachers from various vocational colleges, 1 study with Senior High School and primary schools teachers and 1 study with both rural and urban areas teachers.

4.2 Measures and instruments

The present study found that the most frequently used instrument to assess emotional intelligence among teachers was the Wong Law Emotional Intelligence Scale WLEIS (n=8). It is a 16-item self-report instrument developed by Wong and Law (2002) to assess the trait EI, especially in the Chinese context, using the revised Mayer and Salovey model[2], [3]. This instrument consists of four dimensions: (1) self-emotion evaluation, (2) others' emotion appraisal, (3) use of emotion, and (4) management of emotion[20]. Table 2 shows that countries such as Spain, based on the Wong and Law scale, have developed a Spanish version scale. Besides, other instruments, such as the Schutte Multi-Factor Emotional Intelligence scale, Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF), Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), Self-Report Emotional Intelligence Test (SREIT), and EQ-I were also used. It is worth noting that most instruments used to assess teachers' emotional intelligence are based on self-report instruments and few instruments such as the MSCEIT and MEIS scales which measure ability EI have been used(n=3).

Furthermore, various instruments have also been used to measure teachers' job satisfaction. Some have concentrated on measuring satisfaction on specific facets of teachers' job, whereas others have sought to measure the overall teachers' job satisfaction. Therefore, the most frequent instrument used in these studies was the Minnesota Satisfaction Questionnaire (MSQ) which is a self-report questionnaire that consists of 100 items in the long-form and 20 items in the short form that measure various aspects of job satisfaction and has been widely used in a variety of settings including business, education, healthcare etc.[21]. It was developed by Weiss et al. in 1967 and has since been revised and updated several times and is specially designed to measure eight different facets of job satisfaction, including: Achievement, Advancement, Authority, Company policies and practices, Compensation, Coworkers, Job security and the Nature of work[22]. It is a reliable and valid measure of job satisfaction, with high internal consistency and test-retest reliability.

In addition to the MSQ scale, the included studies also used the overall job satisfaction scale, the Organizational Satisfaction Scale, the Teachers' Job Satisfaction Scale (TJSS),

the Generic job satisfaction scale, and a variety of different Job Satisfaction Scales[23]–[27]. Moreover, of the 21 reviewed studies, some studies (n=5) did not provide information on the instruments used to evaluate teachers' JS.

4.3. Summary of studies in relation to the effects of emotional intelligence on teachers' job satisfaction

To examine the effects of emotional intelligence on teachers' job satisfaction, we used a content analysis method and focused on the content of studies relevant to the objectives of this scoping review[28]. Overall, most studies revealed that emotional intelligence positively affects teacher job satisfaction directly and indirectly. The analyses of the articles related to the direct and indirect effects will be described, discussed, and summarized in the following sections.

4.3.1. Direct effect of EI on teachers' job satisfaction

The reviewed studies on the direct effect of EI on teachers' job satisfaction were categorized and concluded that EI had a direct positive effect on teachers' job satisfaction[29]–[34]. These studies revealed that emotional intelligence (EI) plays a significant role in teachers' job satisfaction because it improves their ability to cope with the challenges and stressors associated with their profession, such as managing challenging students, dealing with parents, and navigating administrative tasks. Findings demonstrated that, highly emotional intelligent teachers are more likely satisfied with their job and have a more positive attitude towards work[35].

For instance, Latif et al. (2017) used a cross-sectional design to explore the mediating role of job satisfaction, organizational commitment, and turnover intentions in the relationship between EI and job performance and found that EI had a significant direct effect on job satisfaction[31]. This implies that teachers with high EI are more satisfied and committed to their institution and, thus, more satisfied with their job, with little or no intention of leaving.

Another study conducted by Rogowska & Meres (2022) among 322 teachers in Poland revealed that Emotional intelligence is a strong direct positive predictor of teachers' job satisfaction[29]. Emotional intelligence, therefore, directly impacts teachers' job satisfaction by enhancing their ability to perceive emotions necessary for achieving teaching goals and creating a conducive teaching environment. Moreover, since teachers with high emotional intelligence have high job satisfaction, those with low emotional intelligence are less satisfied with their job[36].

Besides, what is also interesting in this review is that school headmasters' and principals' EI competencies are found to have a direct positive effect on teachers' job satisfaction. For instance, a study conducted by Toprak et al. (2020) discovered that headmasters' EI positively affected teachers' job satisfaction[37]. This suggests that when school headmasters are able to effectively regulate their emotions through EI competencies, they are able to recognize teachers' emotions, which in turn makes teachers feel better about their profession and increase their job satisfaction. Similar results can be found in the Waruwu (2015) study, which reported a significant positive correlation between teachers' perceptions of the principal's emotional intelligence and job satisfaction. His study suggested that a principal's emotional intelligence can encourage teachers' job satisfaction[33].

In summary, the studies reviewed above indicate that the effect of EI on teachers' job satisfaction is direct and positive and that factors such as school headmasters or principals' EI competencies are also very important in increasing teachers' job satisfaction.

4.3.2. Indirect effect of EI on teachers' job satisfaction

This study also found that several variables may influence EI's indirect effect on teachers' job satisfaction. These variables include work engagement, supervisor support, workplace incivility, coping humor, unpleasant emotions, etc.

Mérida-López & Extremera (2020) administered a battery of questionnaires to 190 secondary-school teachers working in different centers of Southern Spain to gain more insight into the associations among ability EI, work engagement, and job satisfaction[38]. Consequently, it was found that ERA (Emotion regulation ability), which is a component of Emotional intelligence, did not show a significant main effect for predicting levels of job satisfaction, but the interaction term was significant through the mediation of work engagement. The authors suggested that this may be because ERA might improve the way teachers appraise events and situations that might be perceived as a threat in the school, and it might interact with levels of work engagement to cope with handling pressure and stress and positively influence both job and life satisfaction levels. Furthermore, EI was also found to be positively related to job satisfaction but only via support from supervisors, which, in turn, was negatively related to intentions to quit. This has been explained by the fact that emotionally intelligent teachers would be more likely to engage in constructive social interactions with their principals, which may lead to job satisfaction [39], [40]. In addition, Karim et al. (2015) investigated 150 university teachers from four public and two private universities from various cities in Pakistan and found that workplace incivility victimization, which is described in their study as “low-intensity deviant behavior with ambiguous intent to harm the target in violation of workplace norms for mutual respect” mediate the relationship between emotional intelligence and work-related outcomes such as job satisfaction, organizational commitment, turnover intention and Counterproductive Work Behavior Checklist (CWB)[41]. This suggests that teachers with high EI are less likely to fall victim to peer mistreatment and more likely to be satisfied with their job. In addition, Sun et al. (2017) investigated 398 primary school teachers in China and found that coping humor was found to be a significant mediator between EI and job satisfaction[42]. However, it only mediated two sub-dimensions of EI (use of emotion and emotion regulation) and job satisfaction. Besides, unpleasant emotions have also been found to mediate the relationship between EI and job satisfaction[43]. Therefore, emotional intelligence can reduce teachers' perceptions of negative emotions and improve their job satisfaction. Moreover, A recent study conducted by Luque-Reca (2022) also showed that trait ER indirectly influences intrinsic job satisfaction through both positive affect (PA) and negative affect (NA)[44]. Authors suggested that this indirect influence through PA and NA may be because the teacher with a high ER will experience negative affective states less frequently than positive ones, making them maintain positive attitudes towards teaching and be satisfied with their job.

Overall, the studies reviewed above have provided insight into how emotional intelligence indirectly affects teachers' job satisfaction. These studies showed that emotional intelligence plays an important role in increasing teachers' job satisfaction, and variables such as workplace incivility, coping humor, work engagement, support from supervisors, unpleasant emotions, etc., can influence the effects of EI on teachers' job satisfaction.

4.4. The effects of various EI models on teachers' job satisfaction

Based on the theoretical basis and measurement approach used to evaluate the effects of EI in the reviewed studies, this study found that the use of different EI models led to different results. Most studies based on the mixed and trait model of EI demonstrated a direct positive influence and significant predictor of teachers' job satisfaction; however, only 3 studies used the EI ability model, and the results of these 3 studies were inconsistent. For instance, one study found that ability EI was a direct effective indicator of teachers' job satisfaction[29], whereas the other 2 studies found that EI ability model failed to show a main effect for predicting levels of job satisfaction and had no direct effect on teachers' job satisfaction[38], [43].

4.5. Research gaps in the existing literature

With regard to the third research question, while analyzing the literature in this field, we found several limitations. First, we found that most studies were assessed using the

trait EI self-report measures, which might lead to problems of common method variance and possible biases implicit in the use of self-report instruments. In addition, Trait EI Self-report measurement has a further limitation of being simple for participants to manipulate and falsify. According to Tett et al. (2012), people can easily give the impression that they have a high level of emotional intelligence by providing thoughtful, socially acceptable answers[45]. Hence, Future studies should employ ability measures of EI.

Second, most of the studies are cross-sectional, which limits the ability to draw causal inferences. Longitudinal studies are needed to understand the long-term effects of emotional intelligence on teachers' job satisfaction. In addition, the Minnesota Satisfaction Questionnaire, which is not explicitly designed to assess teacher job satisfaction, has been used several times in the reviewed studies. Therefore, further studies can use scales more specifically designed for educational contexts, such as the teacher job satisfaction scale developed by Pepe (2017), to measure the relationship between EI and teacher job satisfaction [11].

In addition, Studies are also needed to determine whether demographic factors such as gender, teaching experience, location, level of education, etc., can influence the effects of EI on teachers' JS in different countries and contexts.

5. Discussion

This scoping review examined 21 reviewed studies related to the effects of EI on job satisfaction among teachers in terms of studies' general characteristics, Measures and instruments used for data collection, both direct and indirect effects, the effects of various EI models on teachers' job satisfaction and finally the research gaps in the existing literature. Overall, most existing studies were conducted in Spain (4) and Pakistan (4). Additionally, most of the studies were conducted with teachers from primary and secondary schools (n=10) and used a variety of research designs, including cross-sectional, correlational, descriptive, exploratory, survey, etc., to probe the effects of EI on teachers' job satisfaction. With respect to the first research question, the main finding from this review revealed that EI plays a fundamental role in enhancing teachers' job satisfaction. This can be both directly as well as indirectly. Hence, emotional intelligence can directly affect teachers' job satisfaction because teachers with high EI are more adept at managing their own and others emotions, which can positively impact their job. When teachers can recognize and manage their own emotions, they are better able to deal with the stress and challenges that come with their job, and they are more likely to experience satisfaction. This finding echoes the previous meta-analytic review conducted by Miao et al. (2017), who asserted that emotionally savvy individuals are not only high-performing but are also more satisfied with their jobs[39]. In addition, studies included in this review also demonstrated that school headmasters' and principals' EI competencies directly influence teachers' job satisfaction. Besides, several other factors, such as work engagement, supervisor support, workplace incivility, coping humor, unpleasant emotions etc., Indirectly influence the EI -JS relationship. Moreover, this study also found that different EI models affect teachers' job satisfaction differently. Most studies using the mixed EI and trait EI models showed a direct positive effect and strongly predicted teachers' job satisfaction, whereas results with some studies using the ability EI model failed to show a direct influence of EI on teachers' job satisfaction. It implies that additional research is needed to clarify the relationship between teachers' job satisfaction and ability EI.

In terms of practical implications, given the fact that emotional intelligence can be trained and has a significant impact on enhancing teacher's job satisfaction, some reviewed studies suggest that first, it is important that measures or efforts such as in-service training programs be implemented to provide in-service teachers with the opportunity to develop and enhance their emotional intelligence skills[29]–[31], [38]. In other words, health promotion programs for teachers should include training on social-emotional skills to enhance well-being and effective emotion regulation strategies, which would help them cope with teaching-related stressors and increase job satisfaction[32], [40]. Second, for pre-

service teachers, teacher education institutions should implement an EI module into the teacher education program to help them develop emotionally intelligent skills[46] .

Finally, given that the EI competencies of principals and school leaders are likely to impact teachers' job satisfaction, these studies suggested that school leaders have to improve their emotional intelligence, and a system must be implemented to ensure that they consistently display emotionally appropriate behaviors in schools, with a focus on their recruitment, orientation, inductive reasoning, and ongoing professional development[33], [37] .

6. Conclusions

This scoping review provides evidence that emotional intelligence positively impacts teachers' job satisfaction. Overall, this review indicates that EI is associated with increasing levels of teachers' job satisfaction. Trends suggest that teachers with higher EI tend to have a more positive attitude towards work, lower levels of stress and burnout, and higher job satisfaction. Educational institutions could benefit from implementing EI training programs to enhance teachers' emotional intelligence and job satisfaction.

Conflicts of Interest: "The authors declare no conflict of interest."

References

1. Thorndike E. L. Intelligence and its uses. Harper's magazine, 1920.
2. Salovey P. and Mayer J. D. Emotional Intelligence. *Imagin Cogn Pers*, 1990, 185–211. doi: 10.2190/DUGG-P24E-52WK-6CDG.
3. Mayer J. D. and Salovey P. What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications*, Basic Books, 1997.
4. Abiodullah M. and Aslam M. Emotional Intelligence as a Predictor of Teacher Engagement in Classroom. *Bulletin of Education and Research*, 2020, 127-140., 2020.
5. Anari N. N. Teachers: emotional intelligence, job satisfaction, and organizational commitment. *Journal of workplace Learning*, 2012, vol. pp. 256–269.
6. Yin H. B., J. C. K., and Zhang Z. H. Exploring the relationship among teachers' emotional intelligence, emotional labor strategies and teaching satisfaction. *Teach Teach Educ*, 2013, pp. 137-145.
7. Ghanizadeh A. and Moafian F. The role of EFL teachers' emotional intelligence in their success. *ELT journal*, 2010, 424-435.
8. Iordanoglou D. The teacher as leader: The relationship between emotional intelligence and leadership effectiveness, commitment, and satisfaction. *Journal of Leadership Studies*, 2007.
9. Singh B. and Kumar A. Effect of emotional intelligence and gender on job satisfaction of primary school teachers. *European Journal of Educational Research*, 2016, 1-9.
10. Hongying S. Literature Review of Teacher Job Satisfaction. *Chinese Education & Society*, 2007 , 11-16. doi: 10.2753/CED1061-1932400502.
11. Pepe A, Addimando L. and Veronese G. Measuring teacher job satisfaction: Assessing invariance in the Teacher Job Satisfaction Scale (TJSS) across six countries. *Eur J Psychol*, 2017, 396–416. doi: 10.5964/ejop.v13i3.1389.
12. Cooper H. M., "Organizing knowledge syntheses: A taxonomy of literature reviews," *Knowledge in society*, vol. 1, pp. 1-104, 1988.
13. Arksey H. and O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol*, 2005, 19–32. doi: 10.1080/1364557032000119616.
14. Mayer J. D., Caruso D. R., and Salovey P. Selecting a measure of emotional intelligence: The case for ability scales. 2000.
15. Bar-On R. The emotional quotient inventory (EQ-i): A test of emotional intelligence. *Toronto: Multi-Health Systems*, 1997.
16. Goleman. Working with Emotional Intelligence. *J Pers Soc Psychol*, 1998, 947-959.
17. Petrides K. V and Furnham A. Trait emotional intelligence: psychometric investigation with reference to established trait taxonomies. *Eur J Pers*, 2001, 425–448. doi: 10.1002/per.416.
18. Grant M. J and Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Info Libr J*, 2009 , 91-108.
19. Moher D., Liberati A., Tetzlaff J., and Altman D. G. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med*, 2009. doi: 10.1371/journal.pmed.1000097.
20. Wong C. S. and Law K. S. The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *Leadersh Q*, 2002, 243–274. doi: 10.1016/S1048-9843(02)00099-1.
21. Hancer M. and George R. T. Job Satisfaction Of Restaurant Employees: An Empirical Investigation Using The Minnesota Satisfaction Questionnaire. *Journal of Hospitality & Tourism Research*, 2003, 85–100. doi: 10.1177/1096348002238882.

22. Weiss D. J., Dawis R. V., and. England G. W. Manual for the Minnesota satisfaction questionnaire. *Minnesota studies in vocational rehabilitation*.1967.

23. WARR P., COOK J., and WALL T. Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*,1979, pp. 129–148. doi: 10.1111/j.2044-8325.1979.tb00448.x.

24. Judge T. A., Locke E. A., Durham C. C., and Kluger A. N. Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology*,1998,17–34. doi: 10.1037/0021-9010.83.1.17.

25. Zhi-yong X. and Zhi-hong Z. An empirical study of job satisfaction of Beijing primary school teachers. *Teach. Educ. Res.*, 2012.

26. Price J. L. and Mueller C. W. A Causal Model of Turnover for Nurses. *Academy of Management Journal*, 1981, 543–565. doi: 10.2307/255574.

27. Brayfield A. H. and Rothe H. F. An index of job satisfaction. *Journal of applied psychology*, 1951, p. 307.

28. Elo S. and Kyngäs H. The qualitative content analysis process. *J Adv Nurs*, 2008,107–115.

29. Rogowska A. M. and Meres H. The Mediating Role of Job Satisfaction in the Relationship between Emotional Intelligence and Life Satisfaction among Teachers during the COVID-19 Pandemic. *Eur J Investig Health Psychol Educ*, 2022, 666–676. doi: 10.3390/ejihpe12070050.

30. Peláez-Fernández M. A., Mérida-López S., Sánchez-Álvarez N., and Extremera N. Managing Teachers' Job Attitudes: The Potential Benefits of Being a Happy and Emotional Intelligent Teacher. *Front Psychol*, 2021. doi: 10.3389/fpsyg.2021.661151.

31. Latif H., Majoka M. I., and Khan M. I. Emotional intelligence and job performance of high school female teachers. *Pakistan Journal of Psychological Research*.2017.

32. Sökmen Y. and Sarıkaya İ. The mediating role of self-efficacy between emotional intelligence and job satisfaction of primary school teachers. *European Review of Applied Psychology*, 2022.

33. Waruwu B. The Correlation between Teachers' Perceptions about Principal's Emotional Intelligence and Organizational Climate and Job Satisfaction of Teachers of State Senior High School in Gunungsitoli Nias, Indonesia. *Journal of Education and Practice*,2015, 142-147.

34. Wijayati D. T., Kautsar A., and Karwanto K. Emotional Intelligence, Work Family Conflict, and Job Satisfaction on Junior High School Teacher's Performance. *International Journal of Higher Education*, 2020, 179–188.

35. Colomeischi A. A. and Colomeischi T. Teachers' Attitudes towards Work in Relation with Emotional Intelligence and Self-efficacy. *Procedia Soc Behav Sci*, 2014,615–619. doi: 10.1016/j.sbspro.2014.12.435.

36. Li M., Pérez-Díaz P. A., Mao Y., and Petrides K. V. A Multilevel Model of Teachers' Job Performance: Understanding the Effects of Trait Emotional Intelligence, Job Satisfaction, and Organizational Trust. *Front Psychol*, 2018. doi: 10.3389/fpsyg.2018.02420.

37. Toprak M. and Savaş A. C. School headmasters' emotional intelligence and teachers' job satisfaction: Moderation effect of emotional labor. *New Horizons in Adult Education and Human Resource Development*, 2020,4–18. doi: 10.1002/nha3.20282.

38. Mérida-López S. and Extremera N. The Interplay of Emotional Intelligence Abilities and Work Engagement on Job and Life Satisfaction: Which Emotional Abilities Matter Most for Secondary-School Teachers?. *Front Psychol*, 2020. doi: 10.3389/fpsyg.2020.563634.

39. Miao C., Humphrey R. H., and Qian S. A meta-analysis of emotional intelligence effects on job satisfaction mediated by job resources, and a test of moderators. *Pers Individ Dif*, 2017,281–288. doi: 10.1016/j.paid.2017.04.031.

40. Mérida-López S., Quintana-Orts C., Hintsa T. and Extremera N. Emotional intelligence and social support of teachers: Exploring how personal and social resources are associated with job satisfaction and intentions to quit job. *Revista de Psicodidáctica*, 2022, 168–175. doi: 10.1016/j.psicoe.2022.02.001.

41. Karim J., Bibi Z., Ur Rehman, and Khan M. S. Emotional Intelligence and Perceived Work-related Outcomes: Mediating Role of Workplace Incivility Victimization. *Pakistan Journal of Psychological Research*, 2015.

42. Sun P., Chen J. J., and Jiang H. Coping humor as a mediator between emotional intelligence and job satisfaction : A study on Chinese primary school teachers. *Journal of Personnel Psychology*, 2017.

43. Lee Y. H., Kwon H. H., and Richards K. A. Emotional Intelligence, Unpleasant Emotions, Emotional Exhaustion, and Job Satisfaction in Physical Education Teaching. *Journal of Teaching in Physical Education*.2019, 1–31. doi: 10.1123/jtpe.2018-0177.

44. Luque-Reca O., García-Martínez, I., Pulido-Martos, M., Burguera, J. L., & Augusto-Landa, J. M., Teachers' life satisfaction: A structural equation model analyzing the role of trait emotion regulation, intrinsic job satisfaction and affect. *Teaching and Teacher Education*,2022 [Online]. Available: <https://www.sciencedirect.com/science/article/pii/S0742051X22000397>

45. Tett R. P., Freund K. A., Christiansen N. D., Fox K. E., and Coaster J. Faking on self-report emotional intelligence and personality tests: Effects of faking opportunity, cognitive ability, and job type. *Pers Individ Dif*,2012 ,195–201. doi: 10.1016/j.paid.2011.10.017.

46. Butakor P. K., Guo Q., and Adebawale A. O. Using structural equation modeling to examine the relationship between Ghanaian teachers' emotional intelligence, job satisfaction, professional identity, and work engagement. *Psychology in the Schools*,2021,534–552.